

Abstract

A process for producing a multiplicity of microfluidic arrangements from a plate-shaped composite structure and an atomiser which is provided with such nozzle arrangements is proposed. Each arrangement has a groove structure which forms flow channels and the dimensions of which are in the micrometer range. The lines for optional subsequent mechanical separation of bridging groove structures are joined to each other and are partly or completely filled with a filling medium before mechanical machining. The medium is selected so that it is not removed from the groove structures either by the mechanical machining or by aids used during mechanical machining. Afterwards, however, the filling medium is removed from the groove structures by suitable measures. The groove structures are thereby prevented from becoming blocked due to mechanical contaminants.